The opinion in support of the decision being entered today was ***not*** written for publication and is ***not*** binding precedent of the Board.

Paper No. 136

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

KAZUO SAWADA et al.

Junior Party,[1]

v.

SUNGHO JIN, RICHARD C. SHERWOOD and ROBERT B. VAN DOVER

Senior Party.[2]

_____

Patent Interference No. 103,141

_____

ON BRIEF

_____

[1] Application Serial No. 07/624,536, filed December 7, 1990. Accorded the benefit of Application Serial No. 07/152,713, filed February 5, 1988, now abandoned. Assignors to Sumitomo Electric Industries, Ltd.

[2] Patent 4,952,554 granted August 28, 1990, based on Appli- cation Serial No. 07/036,160, filed April 6, 1987. Accorded the benefit of Application Serial No. 07/034,117, filed April 1, 1987. Assignors to Lucent Technologies, Inc.

Before Calvert, Pate and Hanlon, ***Administrative Patent Judges***.

Pate, ***Administrative Patent Judge***.

FINAL DECISION UNDER 37 CFR § 1.658

Pursuant to 37 CFR § 1.658, this is a final decision in Interference No. 103,141. The junior party's involved application is Serial No. 07/624,536, filed on December 7, 1990, in the names of Kazuo Sawada, Kazuhiko Hayasi, Sigeki Isojima, Susumu Yamamoto, Teruyuki Murai, Nozomu Kawabe, Hideo Itozaki, Nobuhiko Fujita, Kenichiro Sibata, Nobuyuki Sasaki, Shuji Yazu, and Tetsuji Jodai.[3] The application is assigned to Sumitomo Electric Industries, Ltd. The senior party involved patent is U.S. Patent No. 4,952,554 issued on August 28, 1990 to Sungho Jin, Richard C. Sherwood, and Robert B. Van Dover. The patent is assigned to Lucent Technologies, Inc.[4]

The interference subject matter deals with a process for manufacturing a superconducting conductor such as a wire

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[3] Hereinafter the parties will be referred to in the singular, i.e., as Sawada and Jin.

[4] Senior party's unopposed motion to accept a belated notification under 37 CFR § 1.602 that Lucent is the successor in interest of the senior party's original assignee is **GRANTED**. Paper No. 125, received November 3, 1999.

or the like. The conductor is manufactured by placing super-conducting oxide powder in a tube of so-called normal metal. The metal is normal in the sense that it is not superconductive.

The normal metal thus establishes a cladding around the oxide powder. The powder and the cladding are subject to a cross-section reduction metal working procedure to reduce the powder and the cladding to a wire size article or elongate body. Thereafter, the elongate body is heat treated so that substantial sintering of the oxide powder occurs, resulting in a product that has a superconducting core in a normal metal outer cladding.

In Jin's disclosure, the superconducting oxide, $YBa_2Cu_3O_{6.9}$, is of the so-called 1,2,3-type. When the oxide powder is sintered, provision must be made to keep the oxygen content of the sintered oxide within an acceptable range. Solutions to this problem include selecting a cladding that does not oxidize at the sintering temperature preventing reaction of the cladding with the oxide powder, or providing orifices in the cladding to admit additional oxygen.

Sawada also includes examples in the involved application wherein the oxide powder in the cladding is first sintered and the cross-section reduction occurs during or after sintering. See examples 1 and 2 of Sawada's specification.

Counts 2 and 3 read as follows:

2. A method of producing an elongate superconductive body, characterized in that the method comprises

(a) forming an intermediate body comprising a normal metal cladding surrounding a quantity of oxide powder and in contact therewith;

(b) forming an elongate body from the intermediate body by means of one or more cross-section-reducing operations;

(c) forming at least one orifice through said metal cladding; and

(d) heat treating the elongate body such that substantial sintering of the oxide powder occurs, with the oxide powder being in contact with an oxygen containing atmosphere by passing oxygen through said at least one orifice; with the oxygen concentration in the atmosphere such that the thus produced body manifests superconductivity, with T_c of 41 K or above, T_c being either $T_c(R=0)$ or $T_c(onset)$, wherein at least the portion of the cladding that is substantially inert with respect to oxygen and with respect to the oxide powder under the treating conditions.

The claims of the parties that correspond to count 2 are:

Sawada 77-90, 94-110, and 114-116

Jin 1-17 and 19-23.

3. A method of producing an elongate superconductive body, characterized in that the method comprises

(a) forming an intermediate body comprising a normal metal, orifice-free cladding surrounding a quantity of oxide powder and in contact therewith;

(b) forming an elongate body from the intermediate body by means of one or more cross-section-reducing operations; and

(c) heat treating the elongate body such that substantial sintering of the oxide powder occurs, with the oxide powder being in contact with an oxygen containing atmosphere during at least part of step (c) such that the thus produced body manifests superconductivity, with T_c of 30 K or above, T_c

being either $T_c(R=0)$ or $T_c(onset)$, wherein at least the portion of the cladding that is in contact with the oxide powder consists essentially of normal metal that is substantially inert with respect to oxygen and with respect to the oxide powder under the treating conditions.

The claims of the parties that correspond to count 3 are:

Sawada 110-116

Jin 1-7, 9-12, 14-23.

Standard of Review

On March 16, 1999, the Patent and Trademark Office issued an interim rule change of patent interference rule 37 CFR § 1.655(a). 64 Fed. Reg. 12900. The rule deals with the application of the abuse of discretion standard by a merits panel when considering an interlocutory order entered by a lone Administrative Patent Judge (APJ) acting in an interlocutory capacity. The rule has been changed to emphasize that a panel of the Board will resolve the merits of an interference as a panel without deference to any interlocutory order. Panels will, however, continue to apply the abuse of discretion standard but only with respect to procedural matters decided by the lone APJ acting in an interlocutory capacity. Accordingly, we consider the substantive issues dealt with by the APJ in his interlocutory capacity and raised by the parties in their briefs giving them ***de novo*** consideration in this decision.

With regard to the date of effectiveness of the amended rule, the interim rule notice states that the amended rule is effective as of the date of publication, ***viz.,*** March

16, 1999. Accordingly, the review of the APJ's decision on the preliminary motions has been decided in the following decision without deference to the prior decision by the lone APJ. It is noted

that both parties have briefed and argued the issue under the abuse of discretion standard, and when the arguments of the parties are characterized, this opinion will accurately reflect those arguments as being under the abuse of discretion standard in order to avoid mischaracterization of a party's position as briefed. However, the standard of review instituted by the interim, and now final, rule has been used by the panel in rendering a decision.

Issues

The following issues are raised by the junior party in its brief. The senior party raises no additional issues.

i) The denial of Sawada preliminary motion 1 to add a count (count A) to the interference;

ii) The failure of the APJ to accord benefit to Sawada with respect to Japanese Application No. 62-25224 as to proposed count A;

iii) The denial of Sawada preliminary motion 15 to accord Sawada benefit of Japanese Application No. 62-25224 as to new count 3;

iv) The denial of Sawada preliminary motion 10 for judgment that claims 1, 3-5, 9-12, 14-16, and 18-23 of Jin are unpatentable under 35 U.S.C. § 112, first paragraph;

v) The denial of Sawada preliminary motion 11 to add a count (count E) to the interference;

vi) The denial of Sawada preliminary motion 12 to accord Sawada benefit of Japanese Application No. 62-77941 as to proposed count E.

Sawada also has filed a motion to suppress or strike portions of the senior party's brief. This motion will be considered hereinbelow.

Motion to Strike

Contemporaneously with the filing of the junior party reply brief, the junior party has filed a motion[5] to strike or suppress certain portions of the senior party's

[5] Paper No. 122, filed July 31, 1995.

brief. The senior party has opposed[6] the motion. The portions sought to be suppressed, ***viz.***, page 9, line 23 through page 10, line 1, and page 10, line 6 (beginning "Specifically") through page 11, line 9, deal with a declaration filed by senior party Jin in support of a senior party motion in response to Sawada's Opposition No. 6. Sawada argues that the declaration has not been entered into evidence for this final hearing pursuant to 37 CFR § 1.671(a).

According to the junior party's brief, after APJ Ronald H. Smith's second motion decision[7] on May 8, 1995, the parties agreed in a telephone conference with Judge Smith on June 8, 1995 that the parties would forego a testimony period and move directly to file briefs for final hearing. Absence of a testimony period is not normative interference procedure, however. Accordingly, when the undersigned panel took up the case for decision, the panel ***sua sponte*** moved all materials

[6] Paper No. 119, filed August 21, 1995. Note, these papers are out of order in the interference file. Junior party Sawada's reply to the senior party's opposition bears Paper No. 120 and was filed on September 5, 1995.

[7] Paper No. 114.

introduced during the preliminary motion period, including declarations, into evidence and scheduled a period for cross examination.[8] Both parties have waived cross-examination.[9]

Inasmuch as a testimony period has been established, and all evidence admitted after the junior party's motion to strike a portion of the brief was filed, the junior party's motion to strike is DISMISSED.[10]

Background

The interference was originally declared on March 23, 1993 with Jin as junior party and Sawada as senior party. Sawada was accorded benefit of his parent U.S. Serial No. 07/152,713, filed February 5, 1988, and Japanese application 62-77941, filed March 31, 1987. Jin's patent was accorded benefit of U.S. Serial No. 07/034,117 filed on April 1, 1987.

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[8] Paper No. 132, mailed June 6, 2000.

[9] Paper No. 133, received July 11, 2000.

[10] It is further noted that moving party Sawada has benefitted from having testimony entered ***sua sponte*** by the panel. Without evidence in the form of the Sato declaration, Sawada's motion based on non-enablement would have no evidentiary underpinnings.

Sawada was senior party by one day. The original count in interference reads as follows:

Count 1

Method of producing an elongate superconductive body, characterized in that the method comprises

(a) forming an intermediate body comprising a normal metal cladding surrounding a quantity of oxide powder and in contact therewith;

(b) forming an elongate body from the intermediate body by means of one or more cross-section-reducing operations;

(c) forming at least one orifice through said metal cladding; and

(d) heat treating the elongate body such that substantial sintering of the oxide powder occurs, with the oxide powder being in contact with an oxygen containing atmosphere by passing oxygen through said at least one orifice; with the oxygen concentration in the atmosphere such that the thus produced body manifests superconductivity, with T_c of 41 K or above, wherein at least the portion of the cladding that is in contact with the oxide powder consists essentially of normal metal that is substantially insert with respect to oxygen and with respect to the oxide powder under the treating conditions.

The order declaring the interference established time periods for filing preliminary statements and preliminary motions. Sawada did not file a preliminary statement. The

parties filed a total of 17 motions. In a decision on preliminary motions and in an accompanying notice of redeclaration,[11] mailed November 30, 1994, Judge Smith decided the motions and ***sua sponte*** redeclared the interference substituting counts 2 and 3 for count 1. Because Judge Smith denied Sawada benefit with respect to the new counts, Sawada now stood as a junior party that had not filed a preliminary statement. Accordingly, Judge Smith entered an order to show cause under 37 CFR § 1.640(d)(2) against junior party Sawada.

In response to the show cause order, Sawada filed motions, a preliminary statement,[12] a response[13] to the order to show cause requesting final hearing, and an "opposition"[14] to the ***sua sponte*** substitution of counts 2 and 3 for count 1. After another round of motion filings, oppositions, and replies, Judge Smith entered another order[15] deciding the

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[11] Paper Nos. 82 and 83.

[12] Paper No. 87, filed December 27, 1994.

[13] Paper No. 88, filed December 27, 1994.

[14] Paper No. 89, filed December 27, 1994.

[15] Paper No. 114, mailed May 8, 1995.

motions and setting a briefing schedule for the parties with respect to Sawada's request for final hearing in the matter of the order to show cause. The parties have filed main briefs and Sawada filed a reply brief for final hearing. The parties waived oral hearing.

Denial of Sawada Motion 1 to Add Proposed Count A to the Interference

The first issue raised for review is whether Judge Smith erred in denying Sawada Motion No. 1 to add proposed count A to the interference. Count A reads as follows:

Count A

Method of producing an elongate superconductive body, characterized in that the method comprises:

(a) forming an intermediate body comprising a normal metal, orifice-free cladding surrounding a quantity of oxide powder and in contact therewith;

(b) forming an elongate body from the intermediate body by means of one or more cross-section-reducing operations; and

(c) heat treating the normal metal, orifice-free cladding such that substantially sintering of the oxide powder occurs, with the oxide powder being in contact with an oxygen containing atmosphere during at least a part of step (c) such that the thus produced body manifests superconductivity, with T_c of 30K or above, wherein at least the portion of the cladding that is in contact with the oxide powder consists essentially of normal metal that is substantially inert with

respect to oxygen and with respect to the oxide powder under the heat treating conditions.

Count A differs from the original count 1 of the interference in two major respects. First, count A is directed to the so-called orifice-free cladding embodiment. Secondly, count A is generic to two species of the invention, ***viz.***, the cross-section reduction with subsequent sintering species, and the sintering with simultaneous or subsequent cross-section reduction species. Original count 1 was directed only to the cross-section reduction with subsequent sintering subject matter.

With respect to the orifice-free limitation of the count, Judge Smith acknowledged that, as originally declared, the Sawada claims designated as corresponding to count 1 were both cladding with orifice claims and orifice-free claims, while the Jin claims designated as corresponding to count 1 were directed

only to the cladding with orifices subject matter. Accordingly, Judge Smith granted the motion to the extent that two new counts were substituted for count 1. New count 2 is

directed to the subject matter of cladding with orifices. New count 3 is
directed to the subject matter of orifice-free cladding. Note, however, that both new counts are still limited to the cross-section reduction with subsequent sintering species.[16]

According to Sawada, "Proposed Count A defines the essential common elements between the parties and permits the party Sawada to rely on its best proofs without prejudice to the proofs of party Jin." Sawada Brief, page 9. Both parties and this panel are in agreement that the cross-section reduction with subsequent sintering species, and the sintering with simultaneous or subsequent cross-section reduction species are separate species. See Sawada Brief at page 12, lines 3-7 and lines 15-17; Jin Brief at page 4. Sawada's argument is that Sawada is entitled to a generic count which comprises both species so that the junior party may rely on its best proofs, i.e., the sintering with simultaneous or subsequent cross-section reduction species not in counts 2 and 3.

[16] Judge Smith also broadened the definition of T_c found in the new counts 2 and 3. That change is not contested here.

When an interference is declared, certain rebuttable presumptions are created that govern the burden of proof and/or the burden of persuasion with respect to motions under 37 CFR § 1.633 filed in the interference. ***See, for example, Orikasa v. Oonishi***, 10 USPQ2d 1996, 2004 (Comm'r Pats. 1989); ***Id.,*** n.17. In declaring this interference with a single count (count 1), there was created the clear presumption, on the record, that the cross-section reduction with subsequent sintering species, and the sintering with simultaneous or subsequent cross-section reduction species were separate species that were not the same patentable invention. Thus, for Sawada to be permitted to add a count with a generic limitation regarding these two species, Sawada must show that these two species are the same patentable invention. This is part of Sawada's burden under 37 CFR § 1.637(a). The burden was on Sawada, and Sawada did not sustain this burden.

Note that Sawada includes an analysis showing that the orifice-free cladding and the cladding with orifices are

separate patentable inventions under 37 CFR § 1.601(n) in motion 1. See Sawada motion 1, Paper No. 12 at 25-26. Judge Smith responded properly to this showing by substituting two counts, each count including one of the orifice or orifice-free species. Addition- ally, it appears from the record that Judge Smith credited the

opposition of Jin, which argued that the cross-section reduction with subsequent sintering species, and the sintering with simultaneous or subsequent cross-section reduction species were separate patentable inventions. However, it was not incumbent upon Jin to make this showing. Jin does not have the burden on this issue.

Sawada's reliance on some kind of "essential common elements" or "essential common subject matter" test (Sawada Brief, at 9 and 11) does not reflect the proper test for same patentable invention in interference law and only serves to obscure the issue. The proper test for determining if the two species in question are the same patentable invention is the obviousness analysis of 37 CFR § 1.601(n). Likewise, Sawada's reliance (Sawada Brief at 12) on Example 16 of MPEP § 2309.01

(6th Ed., Jan. 1995) is misplaced. The first sentence of the Example 16 states, "The PTO will . . . declare interferences where interfering patent and application claims are mutually exclusive ***provided the claims define the same patentable invention***." (Citations omitted, emphasis supplied). Indeed, Example 14, which defines the conditions of Example 16, specifically states that, "[b]enzene and toluene [the two mutually exclusive species of Example 16] define the same patentable invention." Sawada has never established that the two species in question are the same patentable invention.

Sawada argues that the junior party should not be penalized for disclosing both species in its involved application. Sawada Brief at 12. Sawada has not been so penalized. In fact, since the sintering with simultaneous or subsequent cross-section reduction species is not within the interference, Sawada has possession of this subject matter free and clear of any interference with Jin. This is the opposite of Sawada's perceived penalty.

Finally, we agree that a count should ideally be formulated to allow a party to rely on its best proofs.

However, this does not extend to including two patentably distinct inventions in one interference count.

We have reviewed the denial of Sawada's motion 1 anew, giving no deference to the decision in the APJ's interlocutory order. We have reached the independent conclusion that the motion was correctly decided. The motion stands properly DENIED.

The Failure of the APJ to Accord Benefit to Sawada with Respect to Japanese Application No. 62-25224 as to Proposed Count A

As noted above, Sawada Motion 1 to add proposed count A to the interference was properly denied. Consequently, it could not have been improper for the APJ to deny Sawada benefit as to a count never added to the interference.

The denial of Sawada Preliminary Motion 15 to Accord Sawada Benefit of Japanese Application No. 62-25224 as to New Count 3;

After Judge Smith redeclared the interference adding counts 2 and 3, Sawada filed Motion No. 15 pursuant to 37 CFR

§ 1.633(f) for benefit as to count 3 based on Japanese Application No. 62-25224, filed February 5, 1987.

Benefit for priority purposes is determined with respect to the count. A party is entitled to the benefit of an earlier filed application for priority purposes if he or she is in compliance with 35 U.S.C. § 112, first paragraph, with respect to ***at least one species within the count***. ***Mori v. Costain,*** 214 USPQ 295, 297 (Bd. Pat. Int. 1981), ***citing Weil v. Fritz,*** 572 F.2d 856, 865 n.16, 196 USPQ 600, 608 n.16 (CCPA 1978); ***Hunt v. Treppschuh,*** 523 F.2d 1386, 1389, 187 USPQ 426, 429 (CCPA 1975); and ***Den Beste v. Martin,*** 252 F.2d 302, 305, 116 USPQ 584, 586 (CCPA 1958).

The earlier application must contain a written description of the subject matter of the interference count, and must meet the enablement requirement. ***Hyatt v. Boone,*** 146 F.3d 1348, 1352, 47 USPQ2d 1128, 1130 (Fed. Cir. 1998), ***cert. denied***,

525 U.S. 1141 (1999) ***quoting Fiers v. Revel,*** 984 F.2d 1164, 1170, 25 USPQ2d 1601, 1606 (Fed. Cir. 1993) (section 112

paragraph 1 must be met by the earlier application). For an earlier-filed application to serve as constructive reduction to practice of the subject matter of an interference count, the applicant must
describe the subject matter of the count in terms that establish
that he was in possession of the later-claimed invention, including all of the elements and limitations presented in the count, at the time of the earlier filing. ***Hyatt***, 146 F.3d at 1353, 47 USPQ2d at 1131.

Judge Smith, in his first motion decision, had denied Sawada benefit with respect to proposed count A for the reason that count A was not added to the interference. In addition, he denied Sawada benefit with respect to new count 3, because new count 3 required orifice-free cladding. Judge Smith made the factual finding that Japanese Application No. 62-25224 disclosed the cladding as a normal metal pipe packed with the powder oxide, and "'224 is silent as to whether the pipe containing the powder is sealed [at the ends]."[17] Sawada

[17] Paper No. 82 at 7.

does not attack this factual finding. Instead, Sawada argues that the APJ has misconstrued this limitation of count 3. Sawada argues that the APJ has too

narrowly interpreted the orifice-free limitations as requiring that not only the sidewall of the pipe but also the ends thereof be sealed in order for the pipe to be considered orifice-free. Sawada Brief at 16.

The limitation in question is set out in paragraph (a) of count 3 as follows:

> (a) forming an intermediate body comprising a normal metal, orifice-free cladding surrounding a quantity of oxide powder and in contact therewith.

Sawada argues that the APJ's emphasis on the ends of the pipe misses the mark. However, we disagree. The count in interference says nothing about a pipe. The count requires a cladding. Yet Sawada discusses the limitations of the count as if it refers to a "pipe." As we construe count 3, it requires a cladding that ***surrounds*** the powder and is ***orifice***-free. We give both of these expressions their common, everyday meaning. "Surround" is generally taken to mean

"enclosed on all sides." "Orifice" has been defined as "an opening or aperture as of a tube or pipe."[18] The open-ended pipe of the Japanese application does not surround or enclose the powder on all sides. Further- more, as the second definition makes clear, the opening at the

end of the pipe is customarily regarded as an orifice. Accord- ingly, we agree with the conclusion of Judge Smith that the embodiment that is described in the Japanese application is not within the scope of count 3.

Sawada argues that, based on the definition of "cladding," the normal metal need only "cover or overlay" the oxide powder. Sawada Brief at 18. We disagree. The count explicitly uses the term "surround." Sawada cannot by argument transmute explicit count limitations into other limitations more favorable to his position.

We are in agreement with Sawada that the count is not ambiguous and that it should be given its broadest reasonable interpretation. In our view, Judge Smith has done

[18] ***Random House Dictionary of the English Language***, 2nd Unabridged Edition, N.Y., N.Y. 1987 at 1917 and 1366.

so. Our independent conclusion is that Motion 15 of Sawada for benefit stands properly DENIED.

The Denial of Sawada Preliminary Motion 10 for Judgment that claims 1, 3-5, 9-12, 14-16, and 18-23 are Unpatentable under 35 U.S.C. § 112, First Paragraph

During the original motion period, Sawada filed a motion for judgment under 37 CFR § 1.633(a) that claims 1, 3-5, 9-12, 14-16, and 18-23 were unpatentable to Jin on the grounds of lack of enablement. Sawada's argument is that only one oxide is

specifically disclosed in the Jin examples and such a disclosure does not enable the broad oxide powder limitation of Jin's claims.

Although not explicitly stated in section 112, to be enabling, the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without "undue experimentation." ***In re Vaeck,*** 947 F.2d 488, 495, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991); ***In re Wands***, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988); ***In re Fisher,*** 427 F.2d 833, 839, 166 USPQ

18, 24 (CCPA 1970) (the first paragraph of section 112 requires that the scope of protection sought in a claim bear a reasonable correlation to the scope of enablement provided by the specification). Nothing more than objective enablement is required, and therefore it is irrelevant whether this teaching is provided through broad terminology or illustrative examples. ***In re Marzocchi,*** 439 F.2d 220, 223, 169 USPQ 367, 369 (CCPA 1971).

The evidentiary basis for the motion for judgment was a declaration[19] by Kenichi Sato. Mr. Sato states that he regards himself as an expert in superconductor materials. ¶6. It is

Sato's expert opinion that a person skilled in the superconductor materials art would not have been able to predict, as of the filing date of the involved Jin patent, which other oxides
identified at column 2 and in claim 14 could have been success- fully manufactured into elongate bodies according to

[19] Paper No. 22.

Jin claim 1. ¶10. Sato reaches this conclusion based on the unpredictable nature of the superconductor materials art. ¶¶10, 11. Even if we were to accept all statements in the declaration as true, and disregard completely the evidence provided in the opposition declaration, the Sato declaration fails to make out a case for lack of enablement. The declaration fails to address whether the experimentation required to practice the invention would have been undue. While the declaration discusses experimentation in ¶¶11, 12, no analysis is provided as to whether the amount of experimentation required would have been undue in this art. Consequently, it is our conclusion of law that motion 10 fails on its face to satisfy the burden on Sawada, the moving party.

Our independent analysis comports with the analysis of Judge Smith. Motion 10 stands properly DENIED.

The Denial of Sawada Preliminary Motion 11 to Add a Proposed Count E to the Interference

Sawada also moved[20] to redefine the interference subject matter by adding a proposed count E to the interference. Count E reads as follows:

Count E

Method of producing an elongate superconductive body, characterized in that the method comprises:

(a) forming an elongate body comprising a normal metal cladding, having at least one orifice, surrounding a quantity of oxide and in contact therewith by at least one cross-section-reducing operation on at least the oxide; and

(b) heat treating the oxide in the cladding such that substantially sintering of the oxide occurs, with the oxide being in contact with an oxygen containing atmosphere during at least a part of step (b) such that the thus produced body manifests superconductivity, with T_c of 30K or above, wherein at least the portion of the cladding that is in contact with the oxide consists essentially of normal metal that is substantially inert with respect to oxygen and with respect to the oxide under the heat treating conditions and wherein T_c is one of onset T_c, midpoint T_c, R=0 T_c and flux expulsion T_c.

According to Sawada, proposed count E differed from existing count 1 in that the order of sintering and reduction is not specified, the superconducting oxide is not specified as a powder but merely as an oxide, and the cladding is claimed as having at least one orifice. Sawada argues that it is

[20] Paper No. 36, received July 27, 1993.

necessary that count E be added since it is neutral to the various features of Sawada's application and is necessary for Sawada to be able to rely on its best proofs.

Inasmuch as count E is admitted to encompass two species of the invention, ***viz.***, the cross-section reduction with subsequent sintering species, and the sintering with simultaneous
or subsequent cross-section reduction species, our analysis with
respect to the addition of count A, ***supra,*** is apropos here. As we stated, for Sawada to add a generic count to the interference, Sawada has the burden of establishing, by a preponderance of the evidence, that the species encompassed in the genus are the same patentable invention. Since Sawada has not satisfied this burden, this fact alone is enough for us to independently decide that count E cannot be properly added to the interference.

But there's more. Judge Smith's attention was drawn to the oxide powder/oxide paste species issue. Judge Smith

cited evidence[21] from the specification of the Sawada involved application that Sawada regarded the oxide powder species of the involved application as a patentable improvement over the oxide paste disclosed in the Japanese application 62-77941. This evidence alone is also sufficient enough for us to independently

decide that count E cannot be properly added to this interference.

We have independently evaluated the issue of the propriety of adding count E to the interference. We have reached the same conclusion as Judge Smith. Motion 11 stands properly DENIED.

The Denial of Sawada Preliminary Motion 12 to Accord Sawada Benefit of Japanese Application No. 62-77941 as to Proposed Count E

As noted above, Sawada Motion 11 to add proposed count E to the interference was properly denied. Consequently, it could not have been improper for the APJ to

[21] Sawada specification at 7.

deny Sawada benefit as to a count never added to the interference.

Summary

All of the Sawada motions for benefit have been properly denied. Sawada's earliest effective filing date is his U.S. filing date of February 5, 1988. Sawada stands as a junior party that has failed to antedate the effective filing date of senior party Jin. Judgment is entered in favor of Jin hereinbelow.

Judgment

Judgment in Interference No. 103,141 is entered in favor of Sungho Jin, Richard C. Sherwood, and Robert B. Van Dover, the senior party. Sungho Jin, Richard C. Sherwood, and Robert B. Van Dover are entitled to their patent claims 1-23, which claims correspond to the counts in interference. Judgment is entered against Kazuo Sawada, Kazuhiko Hayasi, Sigeki Isojima, Susumu Yamamoto, Teruyuki Murai, Nozomu Kawabe, Hideo Itozaki, Nobuhiko Fujita, Kenichiro Sibata, Nobuyuki Sasaki, Shuji Yazu, and Tetsuji Jodai, the junior party. Kazuo Sawada, Kazuhiko Hayasi, Sigeki Isojima, Susumu Yamamoto, Teruyuki Murai, Nozomu Kawabe, Hideo Itozaki,

Interference No. 103,141

Nobuhiko Fujita, Kenichiro Sibata, Nobuyuki Sasaki, Shuji Yazu, and Tetsuji Jodai are not entitled to their patent claims 77-90 and 94-116, which claims correspond to the counts in interference.

IAN A. CALVERT)
Administrative Patent Judge)
)
)
) BOARD OF PATENT
WILLIAM F. PATE, III) APPEALS AND
Administrative Patent Judge) INTERFERENCES
)
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)
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Interference No. 103,141

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